

Wo Order ID 50526

July 14, 2009 8:50:54 AM



Page 1

Item ID: D3789-3

Accept



Setup Start



Revision ID: A

Stop



Item Name: Clamp

Start Date: 14/07/2009 Start Qty: 7.00



Cust Item ID:

Required Date: 20/07/2009 Req'd Qty: 7.00



Customer: CC-DAR001

Reference:

*09-07-15*

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3789

Rev A

100

0.00



Bandsaw

Jcaspa Bandsaw

Memo

Cut extrusion to 1.250"

0.00

(B43722)

*mmv*  
09/07/15

7

*Pfo*  
~~last page~~

110

0.00



HAAS 1

HAAS CNC vertical machine #1

Memo

Machine as per Folio FA834

Dwg Rev: *AA*

Folio Rev: *AA*

Deburr

0.00

*mmv*  
09/07/15

7

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: D3789-3 PAR #: N/A Fault Category: Machine NCR: ☒ Yes No DQA: 10 Date: 09.01.21  
 Resolution: Scrap Disposition: SCRAP QA: N/C Closed: 1 Date: 08.08.17

NCR: <u>50526</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/07/15	110	Part move in fourth operation. .8115 hole is not good. incorrect offset. PC operator error	<u>msm</u>	scrap and replace x1 <u>B43722</u>	<u>msm</u> 09/07/15	<u>S</u> 07/07/20	<u>msm</u>	<u>S</u> 07/07/20

NOTE: Date & initial all entries

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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Setup Start

Stop

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
115  QC Quality Control	QC2- Inspect parts off machine FAI/FAIB  Memo	0.00  0.00	mmf 07/07/15			7			
120  QC Quality Control	QC8- Inspect parts - second check  Memo	0.00  0.00	Jed 07.07.15			7			
130  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00  0.00	JMD 09/07/15			7			

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Page 3

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Customer: CC-DAR001

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

140

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

*BK 09-07-20 (7)*

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

\*\*\*\*\*Mask bearing bore prior to powder coat\*\*\*\*\*

START TIME: *1:25*  
OVENTEMPERATURE: *320°*  
FINISH TIME: *1:55*

*BK 09-07-20 (7)*

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

*EP 09/07/20 (7)*

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Page 4

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Cust Item ID:

Required Date: 20/07/2009 Req'd Qty: 7.00

Customer: CC-DAR001

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

170



Small Fab

Small Fab

0.00

Memo

0.00

Small Fab

1- press fit D2611 bearing after powder coat  
2- stake D2611 bearing 4 places each side as per dwg D3789

*Ep 09/07/20 (7)*

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

*=> Sorted*

*(x7) 6*

190



Packaging

Packaging

Identify as per dwg & Stock Location: \_\_\_\_\_

0.00

Memo

0.00

*Po 9/7/20 (7)*

**Work Order ID 50526**

July 14, 2009 8:50:54 AM



Page 5

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Cust Item ID:

Required Date: 20/07/2009 Req'd Qty: 7.00



Customer: CC-DAR001

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/07/21

mf  
09-07-20

# Picklist Print

Page 1

July 14, 2009 8:50:53 AM

Work Order ID: 50526

Parent Item: D3789-3RevA

Parent Item Name: Clamp



Comments:

Start Date: 14/07/2009

Required Date: 20/07/2009

Start Qty: 7.00

Required Qty: 7.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2423RevB1  Lug Extrusion		Manufactured	No			170	f	767.4300	0.5158 			

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

ST

767.43

43722

219.5

43722

5158

MA 07/07/16

44529

22.39

45800

525.54

D2611RevC



Bearing

Manufactured

No

100

Each

31.0000

7.0000  


Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

31

46841

31

50021

7

MF 09-07-20

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 50526
<b>Description:</b> Clamp		<b>Part Number:</b> D3789-3
<b>Inspection Dwg:</b> A	<b>Rev:</b> AA	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.20	±.03	4.2	✓			
3.45	±.03	3.45	✓			
.31	±.03	.31	✓			
.75	±.03	.75	✓			
.38	±.03	.37	✓			
.40	±.03	.39	✓			
.4	±.03	.39	✓			
R 1.38	±.03	R 1.38	✓			
2.07	±.03	2.06	✓			
1.12	±.03	1.12	✓			
.56	±.03	.56	✓			
Ø .257	±.003	.258	✓			
Ø .8115	±.0115	.8115	✓			
R .20	±.03	R .20	✓			
R .06	±.03	R .06	✓			
R .25	±.03	R .25	✓			
R .032	±.01	R .032	✓			
R .38	±.03	R .38	✓			
R .50	±.03	R .50	✓			
R .75	±.03	R .75	✓			
R .34	±.03	R .34	✓			

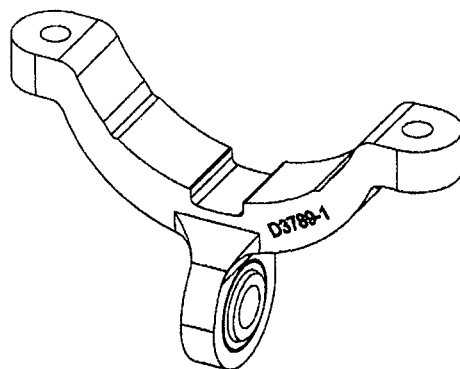
<b>Measured by:</b> mmf
<b>Date:</b> 09/07/15

<b>Audited by:</b> [Signature]
<b>Date:</b> 09.07.17

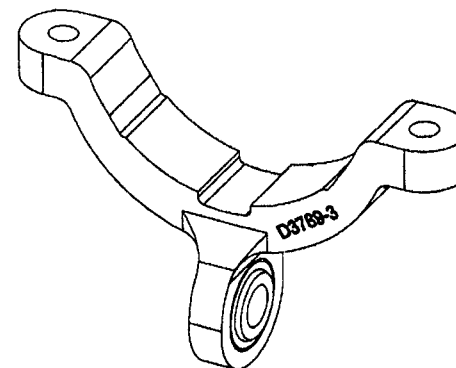
<b>Prototype Approval:</b>	N/A
<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

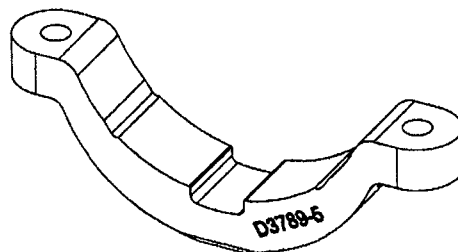




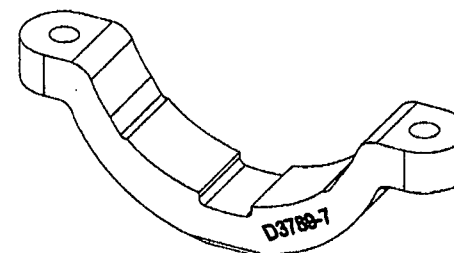
**D3789-1 CLAMP**



**D3789-3 CLAMP**



**D3789-5 CLAMP**



**D3789-7 CLAMP**

**DEO ATTACHED**

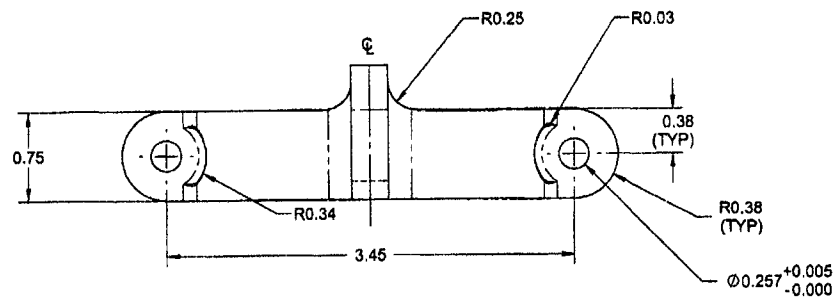
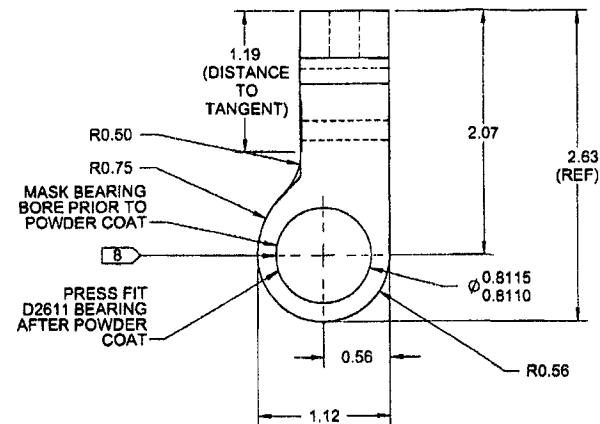
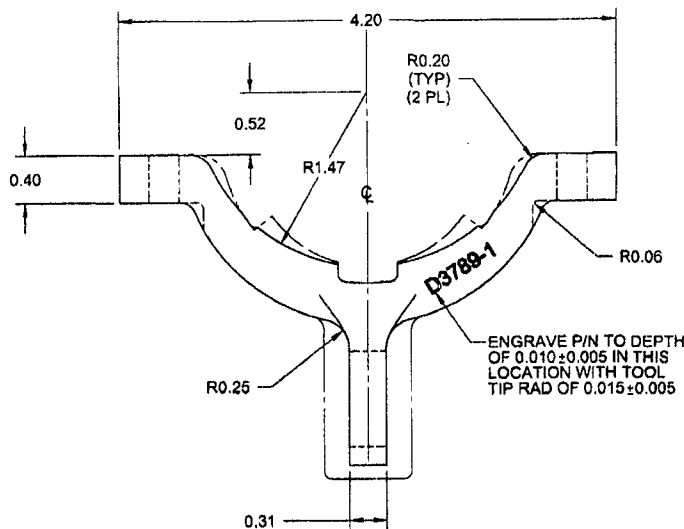
**RELEASED**  
08/12/21

**NOTES:**

- 1) MATERIAL: MANUFACTURE FROM D2423 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE WITH DART P/N AS SHOWN
- 7) WEIGHT: D3789-1, 0.16 lbs  
D3789-3, 0.16 lbs  
D3789-5, 0.14 lbs  
D3789-7, 0.14 lbs
- 8) STAKE D2611 BEARING 4 PLACES EACH SIDE AFTER POWDER COAT
- 9) PART IS SYMMETRICAL ABOUT  $\phi$

50526

A NEW ISSUE		HS	08.05.21
REV.	DESCRIPTION		BY DATE
DESIGN	HS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	HS		
CHECKED	HS	DRAWING NO	REV. A
MFG. APPR.		D3789	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		CLAMP	NTS
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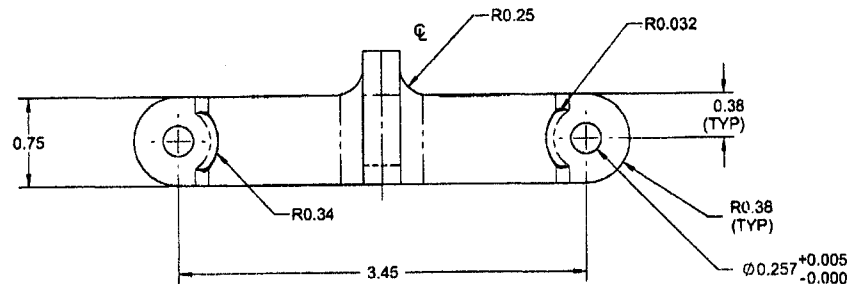
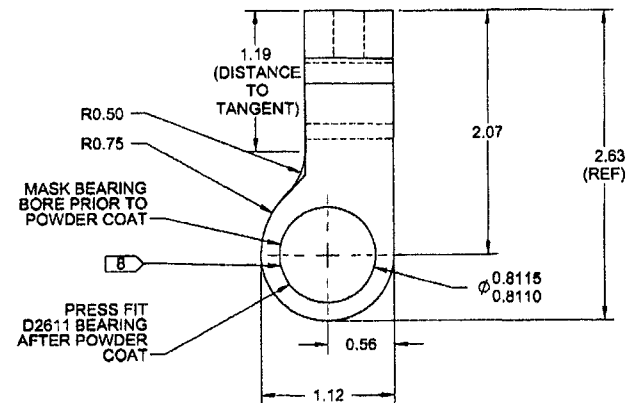
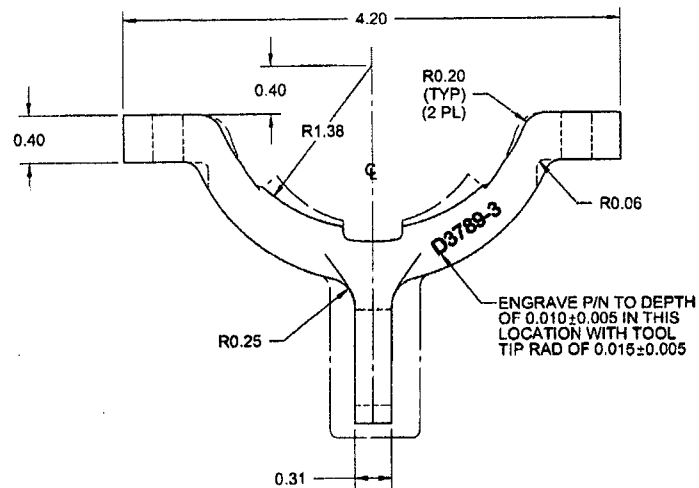
**D3789-1 CLAMP**

DEO ATTACHED

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08/12/21

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DESIGN	HS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
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CHECKED	PW	DRAWING NO.	REV. A
MFG. APPR.		D3789	SHEET 2 OF 6
APPROVED		TITLE	SCALE
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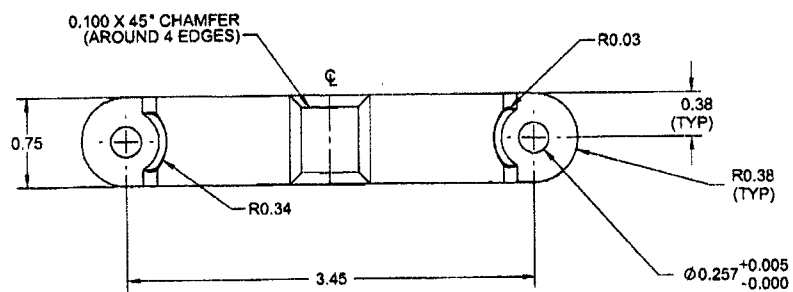
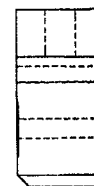
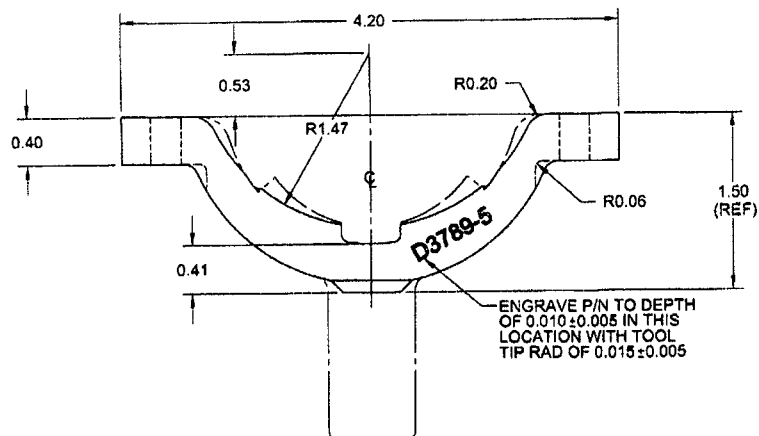
**D3789-3 CLAMP**

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DEO ATTACHED

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08/12/21

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MFG. APPR.			SHEET 3 OF 5
APPROVED		TITLE <b>CLAMP</b>	SCALE NTS
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DATE	08.05.21		







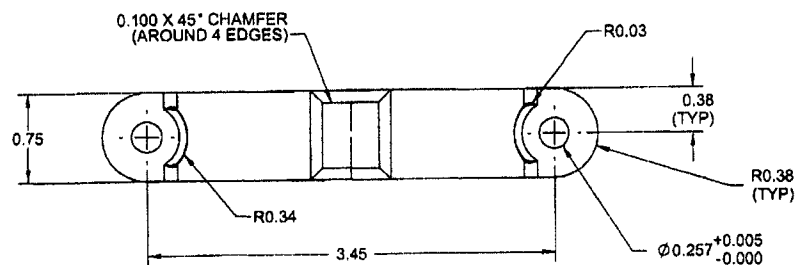
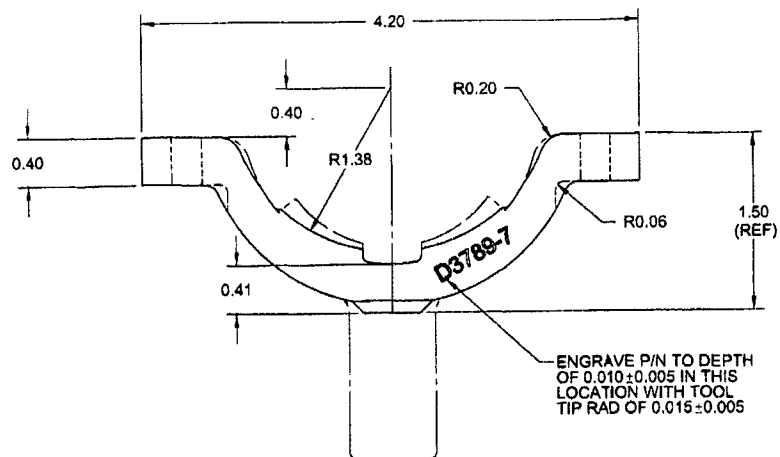
**D3789-5 CLAMP**

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**D3789-7 CLAMP**

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MFG. APPR.	<i>[Signature]</i>	SHEET 5 OF 5	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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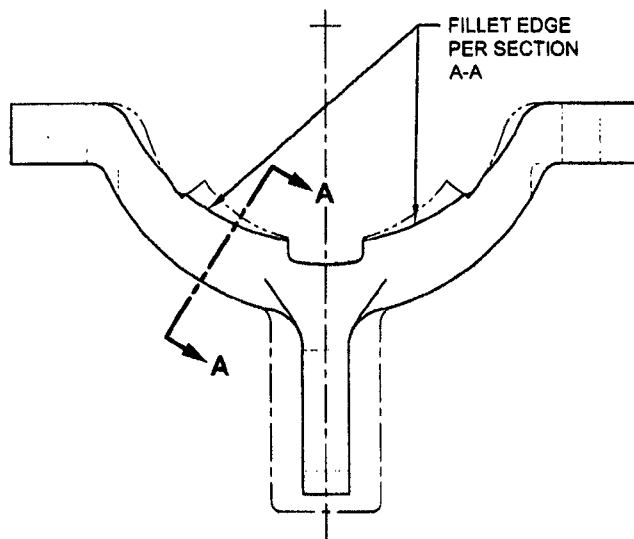
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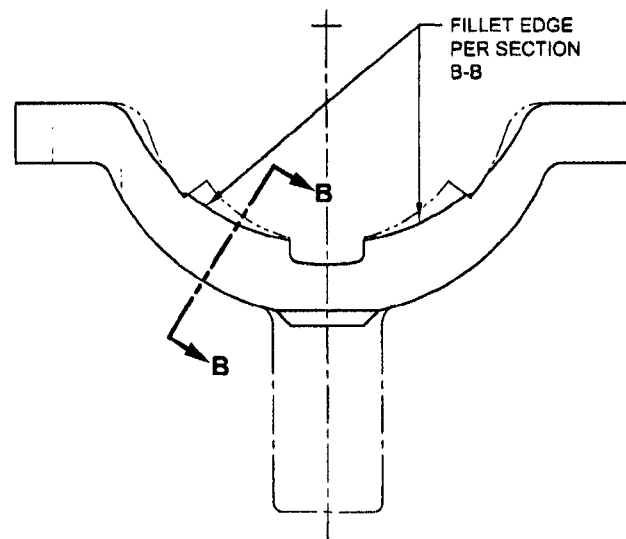
DRAWING NO. D3789	TITLE CLAMP	REV. A	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3789-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED b	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>		DE APPR. <i>[Signature]</i>		
DATE 09.04.20	DATE 09.04.23	DATE 09.04.23	DATE 09/04/23		DATE 09/04/23		

ADD FILLETS TO -1/-3/-5/-7 PER SECTIONS A-A AND B-B TO PREVENT CHAFING OF RUBBER CUSHIONS AS SHOWN:



D3789-1 CLAMP

D3789-3 CLAMP



D3789-5 CLAMP

D3789-7 CLAMP



R0.06 MIN - R0.10 MAX  
2PL

SECTION A-A

SCALE 2X

SECTION B-B

SCALE 2X

SEE PAR 122 FOR FURTHER DETAILS

50526

**RELEASED**  
09/25/24 *[Signature]*